

nm23-H7 (H-278): sc-98518

BACKGROUND

nm23-H7, also known as NME7 (non-metastatic cells 7), is a 376 amino acid protein that contains one DM10 domain and belongs to the NDK family. Using magnesium as a cofactor, nm23-H7 functions to catalyze the ATP-dependent creation of nucleoside triphosphates, thereby playing an essential role in metabolic pathways throughout the body. The gene encoding nm23-H7 maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

REFERENCES

1. Lacombe, M.L., et al. 2000. The human Nm23/nucleoside diphosphate kinases. *J. Bioenerg. Biomembr.* 32: 247-258.
2. Hartsough, M.T. and Steeg, P.S. 2000. Nm23/nucleoside diphosphate kinase in human cancers. *J. Bioenerg. Biomembr.* 32: 301-308.

CHROMOSOMAL LOCATION

Genetic locus: NME7 (human) mapping to 1q24.2; Nme7 (mouse) mapping to 1 H2.2.

SOURCE

nm23-H7 (H-278) is a rabbit polyclonal antibody raised against amino acids 100-376 mapping at the C-terminus of nm23-H7 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

nm23-H7 (H-278) is recommended for detection of nm23-H7 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

nm23-H7 (H-278) is also recommended for detection of nm23-H7 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for nm23-H7 siRNA (h): sc-75935, nm23-H7 siRNA (m): sc-75936, nm23-H7 shRNA Plasmid (h): sc-75935-SH, nm23-H7 shRNA Plasmid (m): sc-75936-SH, nm23-H7 shRNA (h) Lentiviral Particles: sc-75935-V and nm23-H7 shRNA (m) Lentiviral Particles: sc-75936-V.

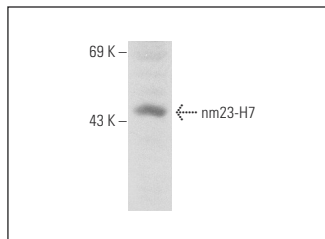
Molecular Weight of nm23-H7: 42 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



nm23-H7 (H-278): sc-98518. Western blot analysis of nm23-H7 expression in HeLa whole cell lysate.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **nm23-H7 (B-9): sc-166677** or **nm23-H7 (F-7): sc-166510**, our highly recommended monoclonal alternatives to nm23-H7 (H-278).